

Claims

- [c1] 1.A tripe cleaning apparatus adapted to wash and refine a quantity of tripe, the apparatus comprising:
a vessel defining an inner chamber for retaining a quantity of tripe; and
a rotatable member housed within the chamber and adapted to rotate in a first direction and in a second direction, wherein rotating in the first direction causes the tripe to be washed and rotating in the second direction causes the tripe to be scarified.
- [c2] 2.The apparatus as set forth in claim 1, further comprising a motor connected to the rotatable member and operable to rotate the member in the first direction and in the second direction.
- [c3] 3.The apparatus as set forth in claim 2, further comprising
a switch connected to the motor and having a first state and a second state,
wherein the switch causes the motor to rotate the member in the first direction when in the first state and causes the motor to rotate the member in the second direction when in the second state.

- [c4] 4.The apparatus as set forth in claim 1, wherein the rotatable member is a substantially circular disc.
- [c5] 5.The apparatus as set forth in claim 4,
wherein the disc presents an upper surface and a plurality of disc projections connected to the disc adjacent the upper surface,
the projections adapted to wash the tripe when the disc is rotated in the first direction and scarify the tripe when the disc is rotated in the second direction.
- [c6] 6.The apparatus as set forth in claim 5,
each of the disc projections presenting a radially oriented longitudinal axis, a washing surface, and a refining surface that is longitudinally opposite the washing surface,
the washing surface adapted to deflect the tripe when the disc is rotated in the first direction,
the refining surface adapted to deflect and scarify the tripe when the disc is rotated in the second direction.
- [c7] 7.The apparatus as set forth in claim 6, the refining surface being selected from the group consisting of serrated, knurled and gritted surfaces.
- [c8] 8.The apparatus as set forth in claim 6, the washing and refining surfaces each presenting a slope from the upper

surface of the disc to the longitudinal axis.

- [c9] 9.The apparatus as set forth in claim 5, wherein each of the projections includes a rectangular rod.
- [c10] 10.The apparatus as set forth in claim 9, wherein each of the rods includes a threaded shaft placed on the rod so that the shaft scarifies the tripe when the disc is rotated in the second direction.
- [c11] 11.The apparatus as set forth in claim 5, wherein the disc presents a plurality of drain holes.
- [c12] 12.The apparatus as set forth in claim 11,
the projections defining a plurality of projection openings,
the disc projection openings axially aligned with the drain holes so as to present a plurality of through holes.
- [c13] 13.The apparatus as claimed in claim 5,
the vessel presenting an inner vessel wall that at least partially defines the inner chamber, and
a baffle fixedly connected to the vessel adjacent the inner vessel wall and radially protruding within the chamber.
- [c14] 14.The apparatus as set forth in claim 13,
the baffle presenting a longitudinal axis, a washing baf-

flle surface, and a refining baffle surface that is longitudinally opposite the washing baffle surface, the washing baffle surface adapted to deflect the tripe when the tripe is rotated in the first direction, the refining baffle surface adapted to deflect and scarify the tripe when the tripe is rotated in the second direction.

- [c15] 15.The apparatus as set forth in claim 14, the refining baffle surface being selected from the group consisting of serrated, knurled and gritted surfaces.
- [c16] 16.The apparatus as set forth in claim 14, the refining baffle surface presenting a plurality of baffle projections.
- [c17] 17.The apparatus as set forth in claim 16, each of the baffle projections including elongated rectangular rods.
- [c18] 18.The apparatus as set forth in claim 17, each of the baffle projections including a threaded shaft.
- [c19] 19.The apparatus as set forth in claim 1, the vessel further including a washing fluid inlet pipe nozzle, a refining fluid inlet pipe nozzle, and a cold water inlet pipe nozzle, each of said nozzles being configured to connect the chamber with an external fluid source.

[c20] 20. A tripe cleaning apparatus adapted to wash and refine a quantity of tripe, the apparatus comprising:
a vessel with a wall defining an inner chamber, wherein the chamber is adapted to contain the quantity of tripe,
a disc housed within the chamber and rotatable in a first direction and in a second direction, the disc including an upper surface and a plurality of disc projections projecting from the upper surface of the disc, each of the disc projections presenting opposed washing and refining surfaces;
said washing surfaces being substantially smooth, and
said refining surfaces being abrasive; and
a motor connected to the disc for selectively rotating the disc in the first and second directions.

[c21] 21. The apparatus as set forth in claim 20, further comprising a plurality of baffles connected to an inner surface of the wall of the vessel and protruding inwardly from the wall, each of said baffles including a baffle washing surface and a baffle refining surface.

[c22] 22. The apparatus as set forth in claim 21, wherein each projection washing surface is adapted to deflect the tripe against the inner wall of the vessel when the disc is rotated in the first direction so that the tripe contacts at least one of the baffle washing surfaces.

- [c23] 23.The apparatus as set forth in claim 22, wherein each baffle washing surface is adapted to deflect the tripe toward a center of the disc.
- [c24] 24.The apparatus as set forth in claim 22, wherein each projection refining surface is adapted to scarify and deflect the tripe against the inner wall of the vessel when the disc is rotated in the second direction so that the tripe contacts at least one of the baffle refining surfaces.
- [c25] 25.The apparatus as set forth in claim 24, wherein each baffle refining surface is adapted to scarify and deflect the tripe toward a center of the disc.
- [c26] 26.The apparatus as set forth in claim 20, each projection refining surface and each baffle refining surface being selected from the group consisting of serrated, knurled and gritted surfaces.
- [c27] 27.The apparatus as set forth in claim 20, each projection refining surface and each baffle refining surface including an elongated rod with a threaded shaft placed along an edge of the rod to engage the tripe when the tripe is being refined.
- [c28] 28.The apparatus as set forth in claim 20, further comprising
a switch connected to the motor and having a first state

and a second state,
wherein the switch causes the motor to rotate the disc in the first direction when in the first state and causes the motor to rotate the disc in the second direction when in the second state.

[c29] 29. The apparatus as set forth in claim 20,
the vessel further including a washing fluid inlet pipe nozzle, a refining fluid inlet pipe nozzle, and a cold water inlet pipe nozzle,
each of said nozzles being configured to connect the chamber with an external fluid source.

[c30] 30. A tripe cleaning apparatus adapted to wash and refine a quantity of tripe, the apparatus comprising:
a vessel with a wall defining an inner chamber, wherein the chamber is adapted to contain the quantity of tripe, the vessel further including a washing fluid inlet pipe nozzle, a refining fluid inlet pipe nozzle, and a cold water inlet pipe nozzle, wherein each nozzle is adapted to connect the chamber with an external water source;
a circular disc housed within the chamber and rotatable in a clockwise direction and in a counter-clockwise direction, the disc including an upper surface and a plurality of disc projections projecting from the upper surface, each of the disc projections presenting a radially oriented longitudinal axis, a substantially smooth washing

surface, and a gritted refining surface,
the washing surface sloping upward from the upper surface of the disc to the axis along the clockwise direction, the gritted refining surface longitudinally opposite the washing surface and sloping upward from the upper surface of the disc to the axis along the counter-clockwise direction;
a motor connected to the disc for selectively rotating the disc in the clockwise direction and in the counter-clockwise direction;
a switch connected to the motor and switchable between a first position, wherein the motor rotates the disc in the clockwise direction, and a second position, wherein the motor rotates the disc in the counter-clockwise direction;
a plurality of baffles coupled to the wall of the vessel, spaced above the disc, and radially protruding inwardly from the wall,
each of said baffles including a substantially smooth concave washing surface sloping away from the inner wall along the counter-clockwise direction, and a gritted concave refining surface longitudinally opposite the washing surface sloping away from the wall along the clockwise direction.

[c31] 31. The apparatus as set forth in claim 30, the disc pro-

jections being removably connected to the upper surface of the disc.

[c32] 32.The apparatus as set forth in claim 30, the baffles radially protruding inwardly and downwardly from the wall.

[c33] 33.A method of washing and refining tripe, the method comprising the steps of:

- (a) placing the tripe on a rotatable member;
- (b) rotating the member in a first direction to wash the tripe; and
- (c) rotating the member in a second direction to scarify the tripe.

[c34] 34.The method as set forth in claim 33, further including the step of:

- (d) introducing a washing fluid around the tripe.

[c35] 35.The method as set forth in claim 34, wherein the temperature of the washing fluid is within the range of 62 to 78 degrees Celsius.

[c36] 36.The method as set forth in claim 33, further including the step of:

- (e) introducing a refining fluid around the tripe.

[c37] 37.The method as set forth in claim 36, wherein the

temperature of the refining fluid is within the range of 80 to 95 degrees Celsius.

[c38] 38.The method as set forth in claim 33, further including the step of:

(f) introducing a cooling fluid around the tripe.

[c39] 39.The method as set forth in claim 33, further including the step of:

(g) agitating the tripe when the member is rotated in the first direction.

[c40] 40.The method as set forth in claim 39, step (g) including the step of deflecting the tripe against a wall.

[c41] 41.The method as set forth in claim 40, step (g) including the step of deflecting the tripe against the wall with a surface projecting from the rotating member.

[c42] 42.The method as set forth in claim 41, step (g) including the step of deflecting the tripe toward a center of the rotatable member of the apparatus.

[c43] 43.The method as set forth in claim 42, step (g) including the step of deflecting the tripe toward the center of the rotating member with at least one baffle projecting inward from the wall of the apparatus.

[c44] 44.The method as set forth in claim 33, step (c) includ-

ing the step of engaging the tripe with a refining projection that projects from the rotatable member.

[c45] 45.The method as set forth in claim 33, step (c) including the step of engaging the tripe with a refining projection that projects from the rotatable member and includes a rectangular rod with a threaded shaft placed on the rod so that the shaft engages the tripe when the rotatable member is rotated in the second direction.

[c46] 46.The method as set forth in claim 44, step (c) including the step of engaging the tripe with an abrasive projection surface of the refining projection.

[c47] 47.The method as set forth in claim 46, step (c) including the step of engaging the tripe with an abrasive projection surface chosen from the group consisting of serrated, knurled, and gritted surfaces.

[c48] 48.The method as set forth in claim 46, further including the step of:
(h) deflecting the tripe against a baffle projecting from an inner wall of the apparatus.

[c49] 49.The method as set forth in claim 48, step (h) including the step of deflecting the tripe against the baffle with the refining projection.

- [c50] 50. The method as set forth in claim 49, step (h) including the step of deflecting the tripe against an abrasive baffle surface.
- [c51] 51. The method as set forth in claim 50, step (h) including the step of deflecting the tripe against a baffle surface that includes a rectangular rod with a threaded shaft placed on the rod so that the tripe engages the shaft when the tripe is deflected against the baffle.
- [c52] 52. The method as set forth in claim 50, step (h) including the step of deflecting the tripe against an abrasive baffle surface chosen from the group consisting of serrated, knurled, and gritted surfaces.
- [c53] 53. The method as set forth in claim 50, further including the step of:
- (i) deflecting the tripe toward a center of the rotating member.
- [c54] 54. The method as set forth in claim 53, step (i) including the step of deflecting the tripe toward a center of the rotating member with the baffle.
- [c55] 55. The method as set forth in claim 54, step (i) including the step of deflecting the tripe toward a center of the rotating member with the abrasive baffle surface.